AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of claims:

- 1. 24. (canceled)
- 25. (currently amended) A method for identifying determining whether a genetic region is associated with responsiveness to an agent, the said method comprising:
 - (a) providing a plurality of single-nucleotide polymorphisms and a plurality of haplotypes for one or more regions of a chromosome;
 - (b) identifying the number of <u>said</u> single-nucleotide polymorphisms of said plurality in at least weak linkage disequilibrium with each other on said chromosomal regions;
 - (c) comparing the number of <u>said</u> single-nucleotide polymorphisms in linkage disequilibrium to the number of <u>said</u> haplotypes in said chromosomal regions; and
 - (d) selecting a correlation test, wherein a single nucleotide-based correlation test is selected if the number of <u>said</u> single-nucleotide polymorphisms in linkage disequilibrium is smaller than the number of <u>said</u> haplotypes, and a haplotype-based correlation test is selected if the number of <u>said</u> single-nucleotide polymorphisms in linkage disequilibrium is greater than the number of <u>said</u> haplotypes, thereby <u>identifying</u> <u>determining</u> whether a <u>said</u> genetic region <u>is</u> associated with responsiveness to <u>an said</u> agent.
- 26. (previously presented) The method of claim 25, wherein the correlation test is a regression test.
- 27. (currently amended) The method of claim 25, wherein the correlation test is ANOVA an analysis of variance.